SYSTEM AND METHOD TO AUTOMATE THE MANAGEMENT

OF HYPERTEXT LINK INFORMATION IN A WEB SITE

ABSTRACT

A Web site management system uses a Web-crawler to traverse (i.e., crawl) Web sites on

5   the Internet. The Web-crawler identifies the Web pages accessible from each Web site and uses

the hypertext link information embedded in those Web pages to discern relationships between

the various Web pages. A change-detection and notification system analyzes the results from the

Web-crawler to determine whether a specific hypertext link is erroneous. The change-detection

and notification system creates an electronic mail message that includes a description of the

10   actions that may correct the erroneous hypertext link, a recommended action, and an attachment

to the electronic mail message that comprises a copy of the Web page after applying the

recommended action. If a subscriber registered the author of the Web page that contains the

erroneous link with the present invention, the change-detection and notification system sends the

electronic mail message to the author. If the author of the Web page is unknown, the change-

15   detection and notification system applies heuristic algorithms and performs a probabilistic

analysis to deduce an electronic mail address that will likely contact either the author or a person

responsible for managing the Web site that hosts the Web page.

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